

places.

BD-RE (Blu-ray Rewritable)

FIG. 1A

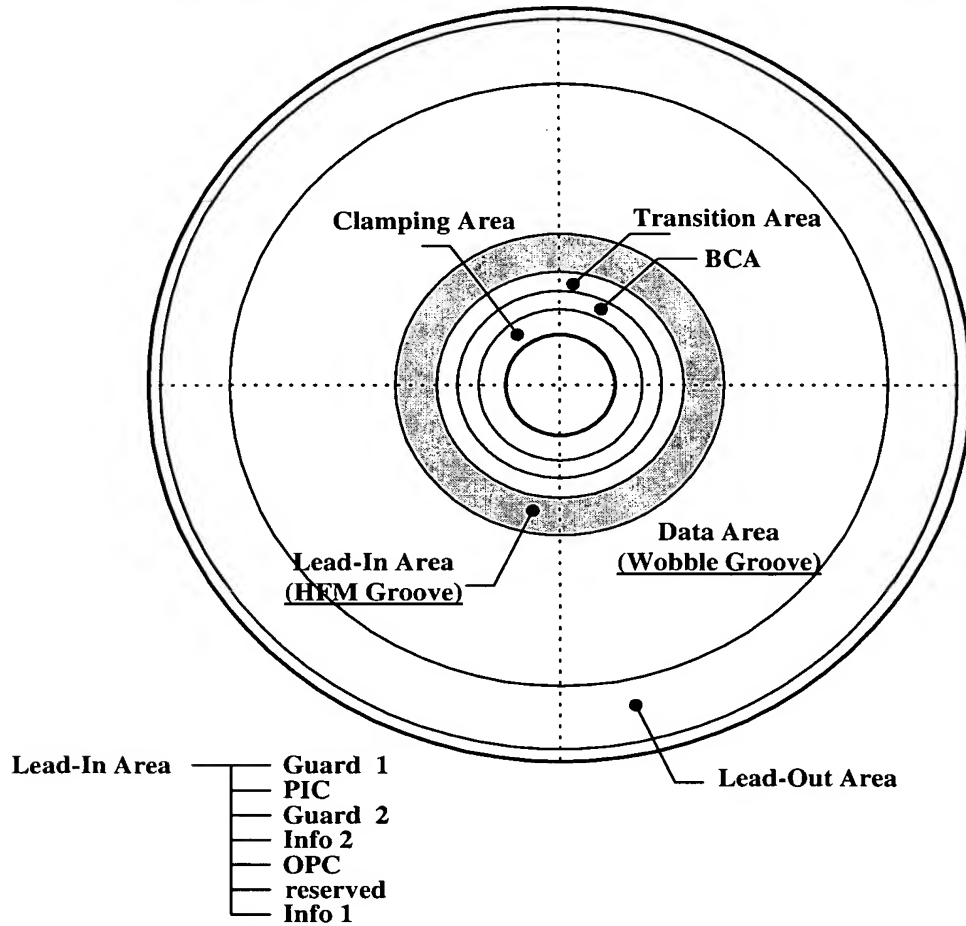


FIG. 1B

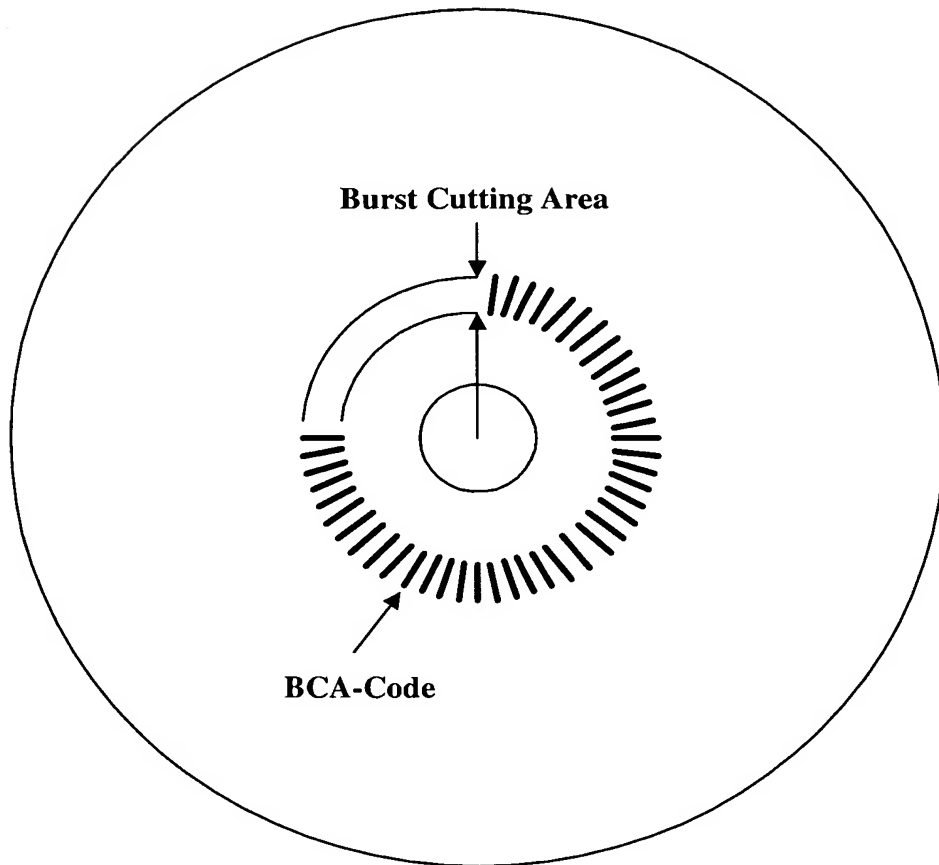


FIG. 2

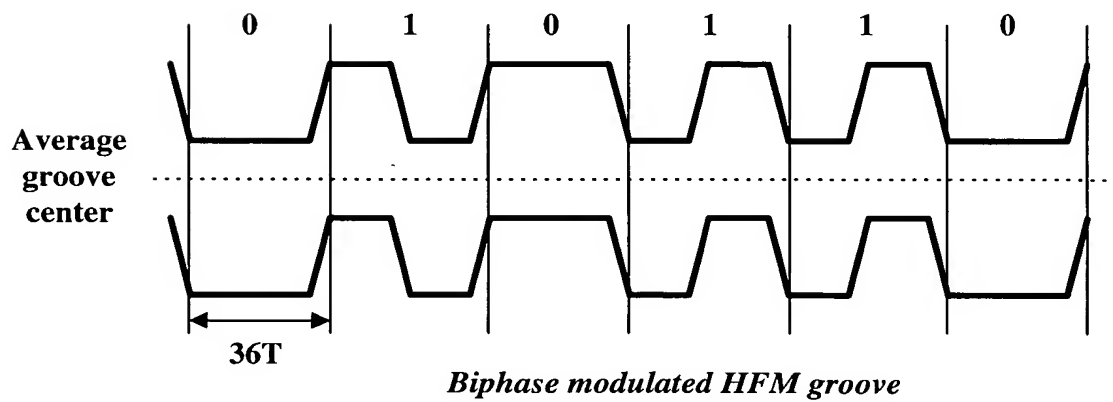


FIG. 3

BD-ROM (Blu-ray ROM)

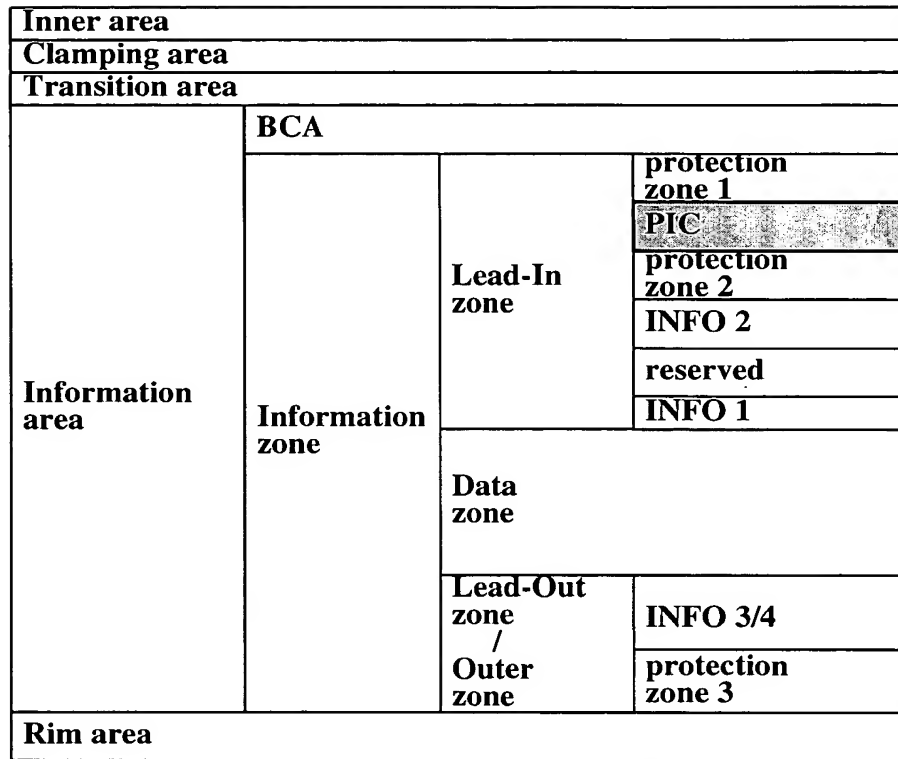


FIG. 4A

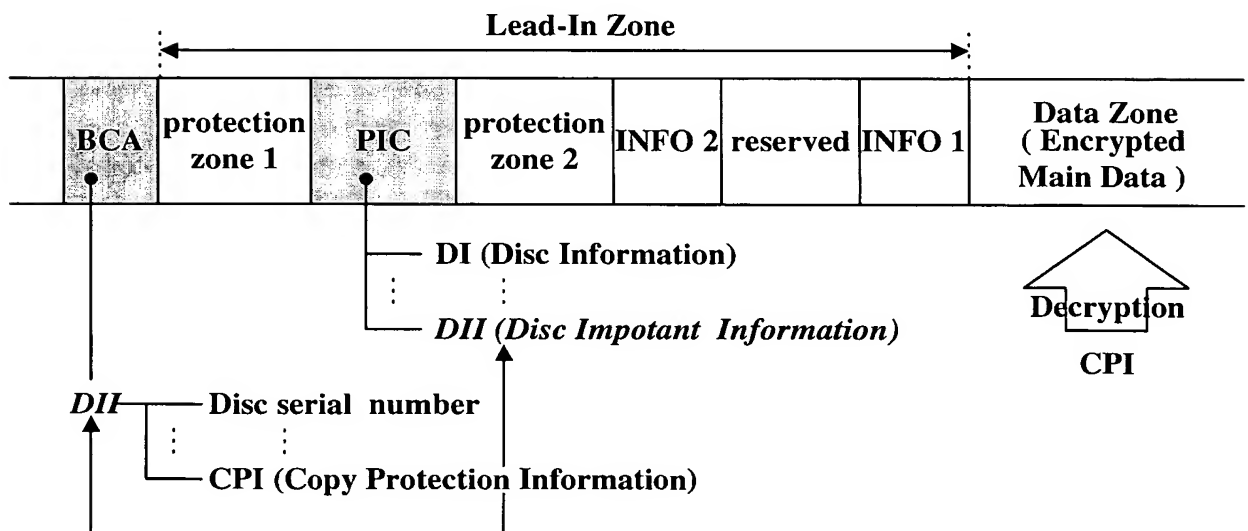


FIG. 4B

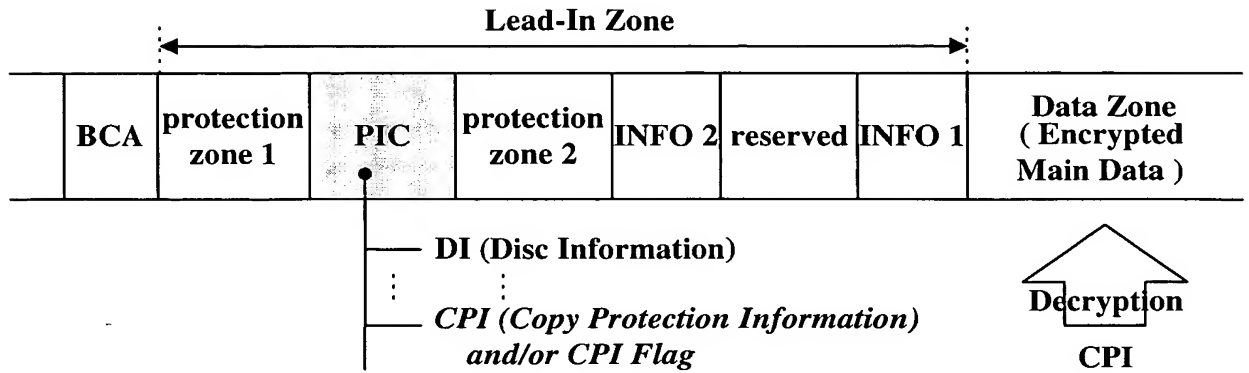


FIG. 4C

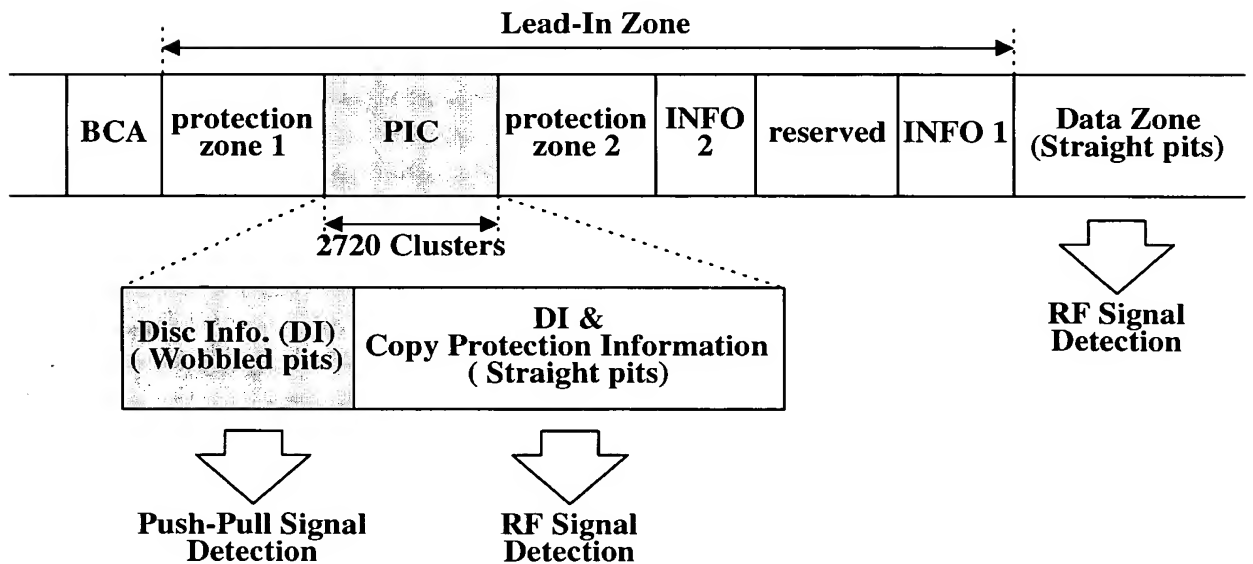


FIG. 4D

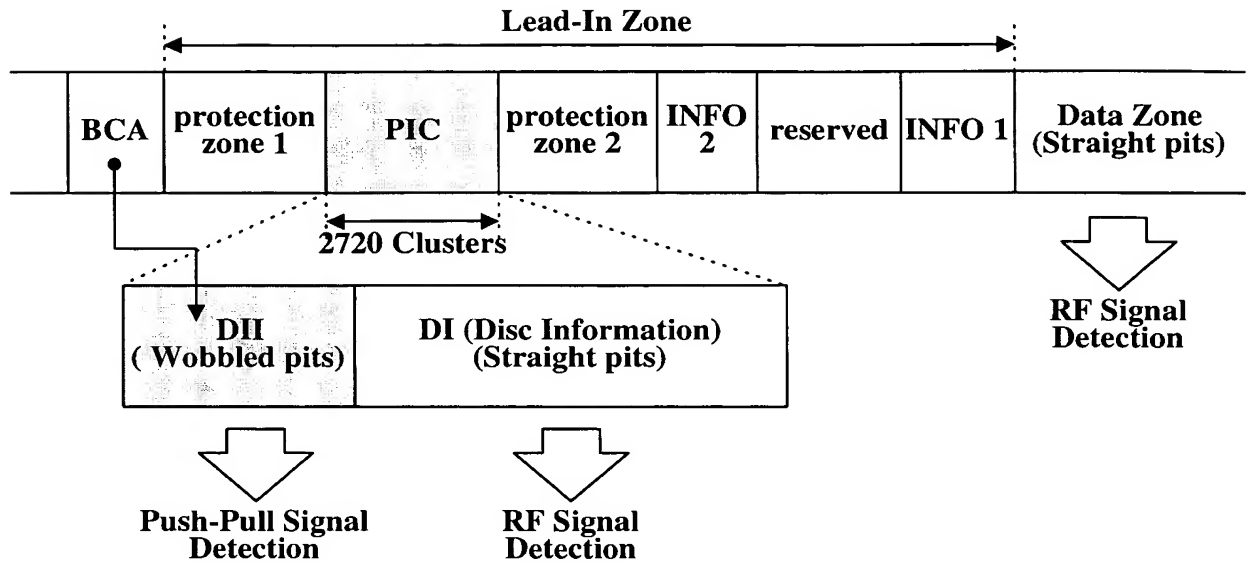


FIG. 4E

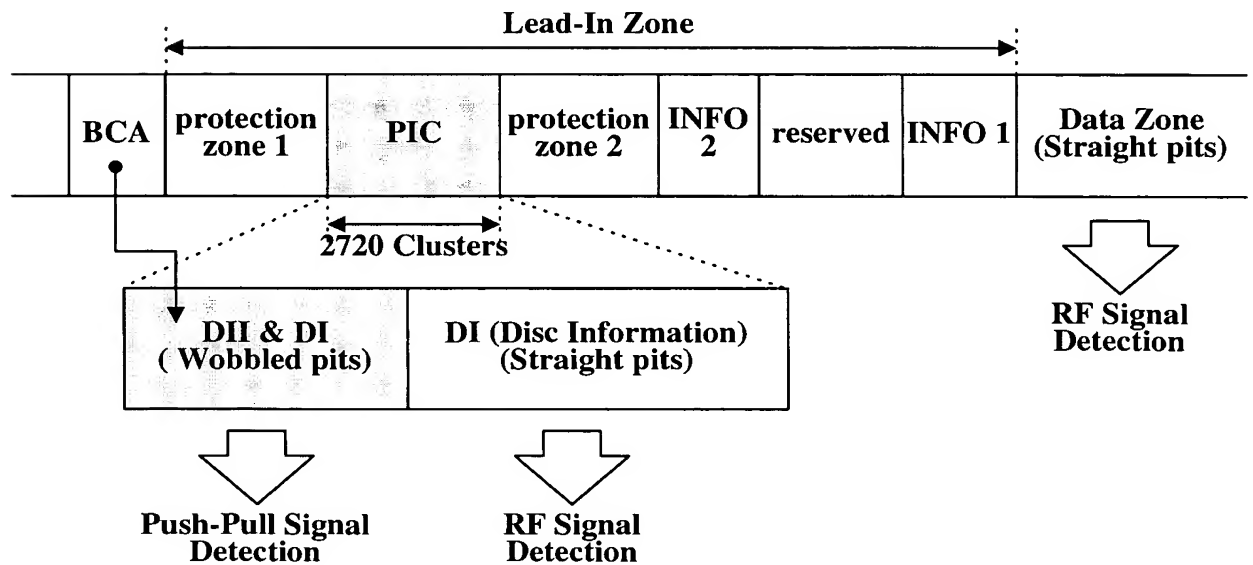


FIG. 4F

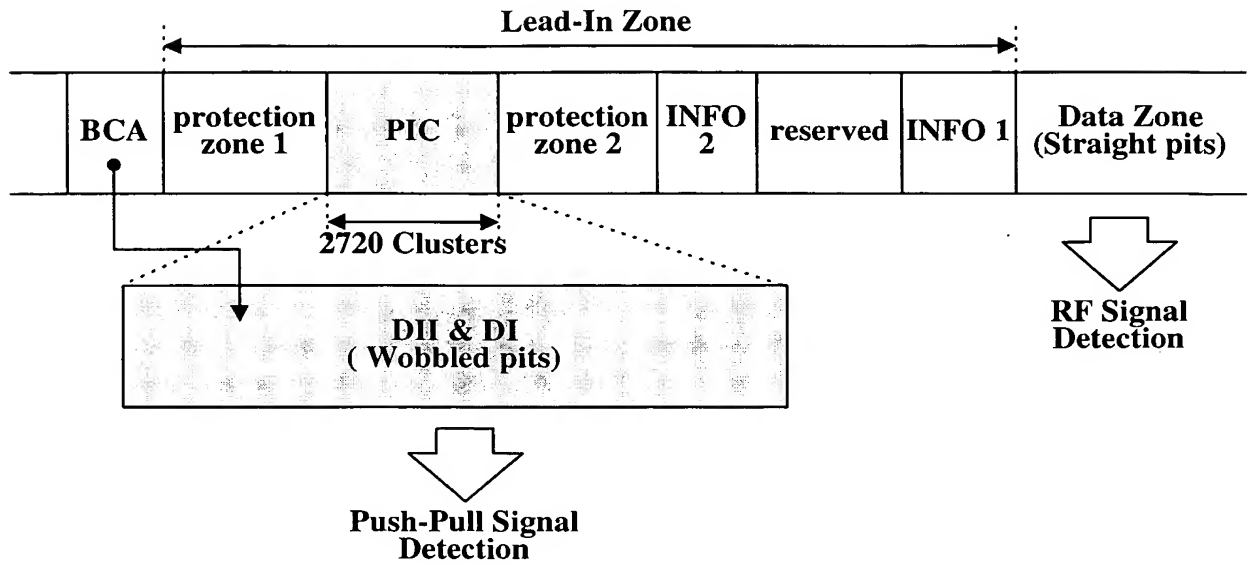


FIG. 5

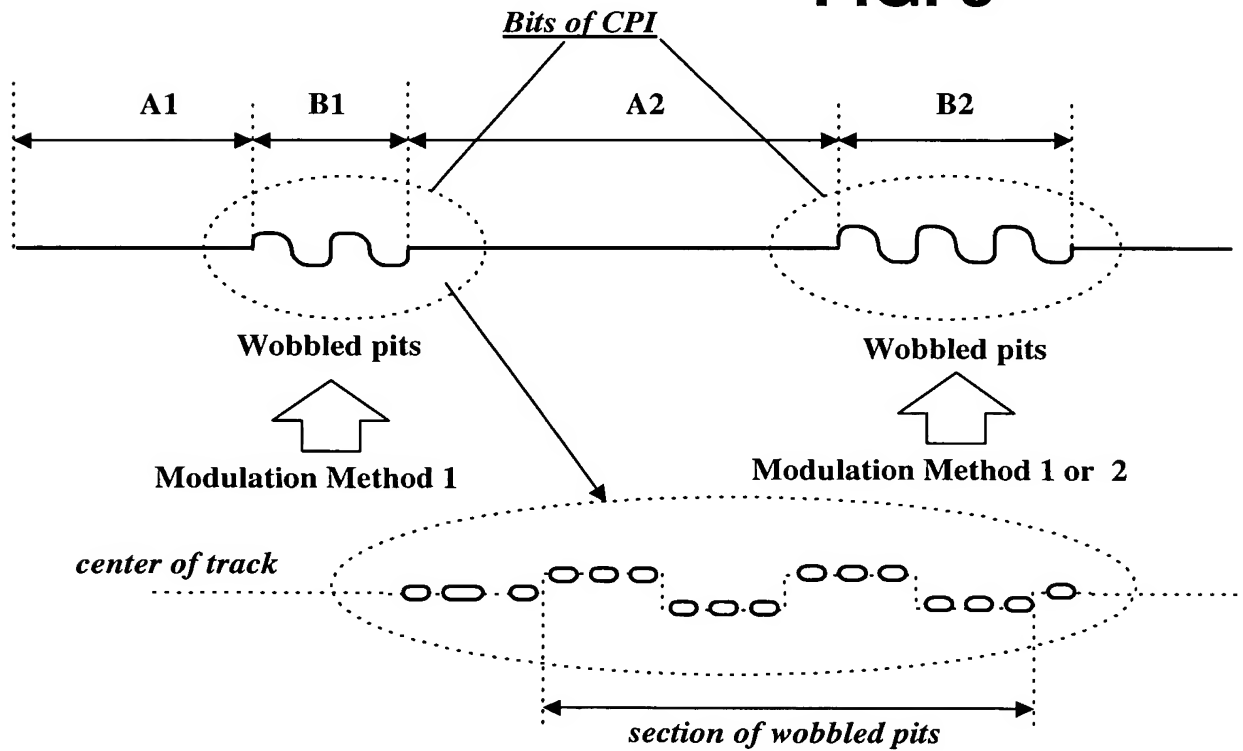


FIG. 6

Physcial Cluster (64KB)

FS0	Data Frame 0 ●		Address Unit 0
⋮	⋮		
FS#	Data Frame 30		
FS0	Data Frame 0 ●		Address Unit 1
⋮	⋮		
FS#	Data Frame 30		
⋮	⋮		⋮
FS0	Data Frame 0 ●		Address Unit 15
⋮	⋮		
FS#	Data Frame 30		

Wobbled pits where ROM Mark is encoded

Figure 1 is a schematic diagram of the optical pickup system. The top part shows the optical path: a laser beam passes through a lens, a beam splitter, and a half-wave plate, then reflects off a mirror and a half-wave plate to illuminate the disc. The disc has four pits labeled Ea, Eb, Ec, and Ed. The bottom part shows the electrical circuit: the four pits are connected to photodiodes (PH) 13, 14, 15, and 16. The outputs of these photodiodes are connected to a differential amplifier (10) and a summing junction (11). The summing junction (11) calculates the difference signal $(Ea+Eb) - (Ec+Ed)$, which is then amplified by the differential amplifier (10) to produce the final output signal (12). A bit sequence (0 1 0 1) is shown as an example of the data being read.

FIG. 8

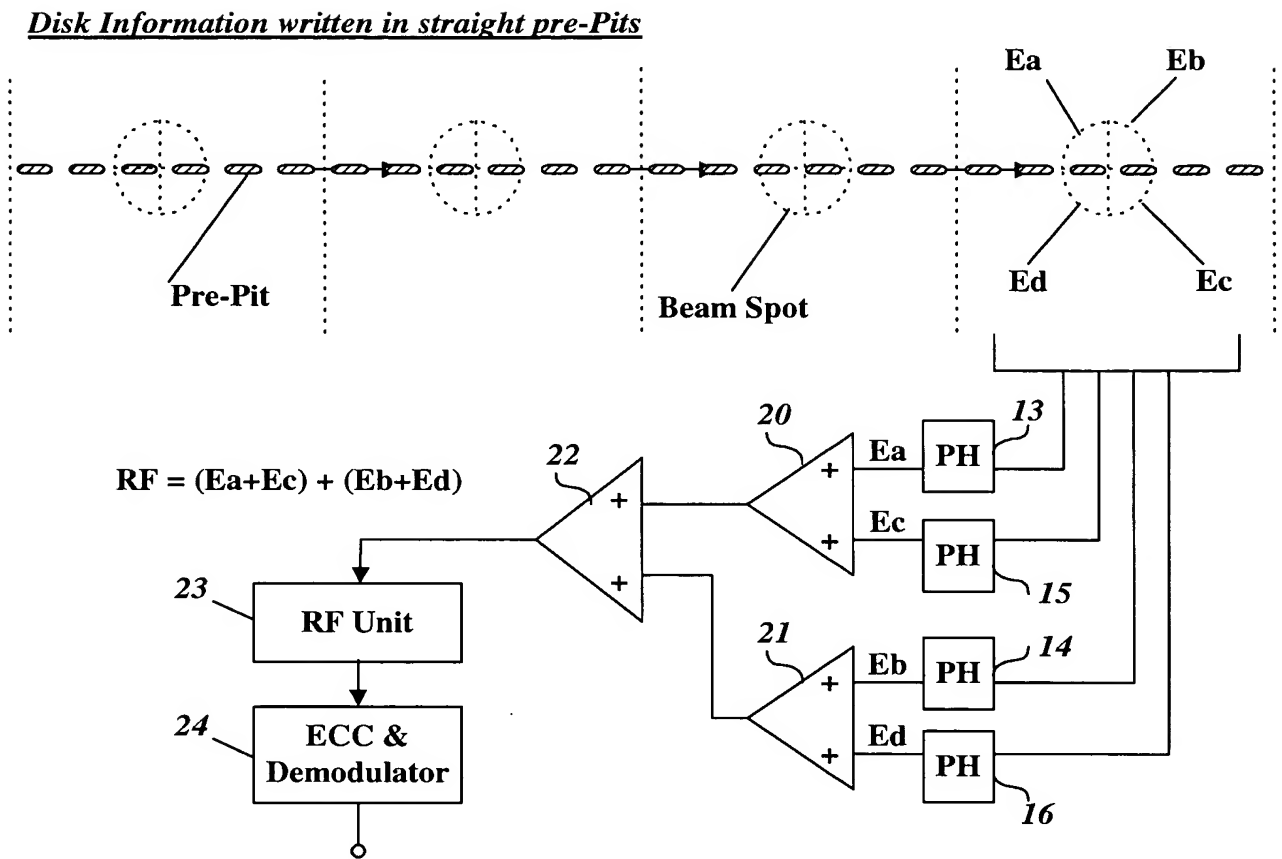


FIG. 9

Byte number	Contents	number of bytes
0	Disc Information identifier = "DI"	2
2	DI format	1
3	Reserved = 00h	1
4	Number of DI frames in each DI Block	1
5	DI Frame sequence number in DI Block	1
6	Number of DI bytes in use in this DI Frame	1
7	Reserved = 00h	1
8 to 10	disc type identifier = "BDO"	3
11	disc size / version	1
12	disc structure	1
13	channel bit length	1
14 to 15	Reserved = all 00h	2
16	BCA descriptor	1
17	maxium transfer rate of application	1
18 to 23	Reserved = all 00h	6
24 to 31	Data zone allocation	8
32 to 111	Reserved = all 00h	13

FIG. 10

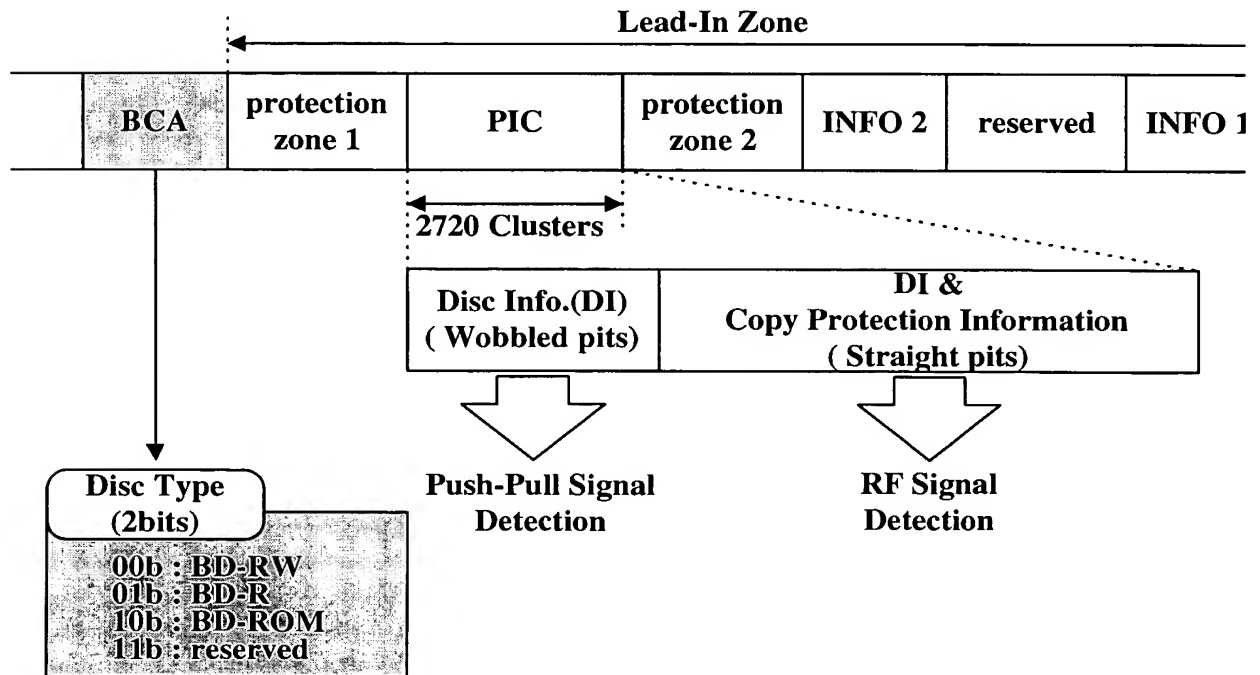


FIG. 11

